

**State CIO  
Agency IT Plans  
2007 – 2009 Biennium**

**Agency IT Plan**

**Office of State Budget and Management**

**October 2006**

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Departmental/Agency IT Plans  
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# **Chapter 1 - Departmental/Agency Strategic Business Initiatives and Major Business Requirements**

## **OSBM Mission Statement**

We deliver the highest quality statewide budgetary, management, and information services by promoting and providing the most effective use of public resources, consistent with state law and the objectives of the Administration.

## **Ongoing OSBM Business Initiatives**

### **Budget Administration**

- Approve and process budget allotments
- Execute budget revisions
- Provide cash management
- Monitor general fund collections vs. budget
- Monitor highway fund collections vs. budget
- Monitor US and NC economy
- Provide technical assistance to agencies
- Assess likelihood of budget shortfalls or emergency funding needs
- Develop fiscal notes/APA; coordinate with agencies
- Administer salary reserve
- Provide fiscal advice to the Governor

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### **Budget Preparation**

- Develop economic outlook
- Prepare continuation budget
- Determine inflation factors for continuation budget
- Prepare expansion budget
- Review and negotiate budget submissions
- Develop revenue forecasts
- Prepare budget documents
- Prepare Post Legislative Summary

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### **Data Services**

- Develop, maintain, and support budgeting and related information systems
  - Collect, produce, analyze, organize, disseminate, and explain data that support state budgeting; provide statistical coordination
  - Develop county and municipal population estimates for distribution of state shared revenues
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### **Legislative Activities**

- Monitor legislative committees
  - Respond to inquiries and coordinate with General Assembly staff
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### **Management Analyses**

- Produce legislated management analyses
  - Perform agency management analyses
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## **Current OSBM Priorities and Objectives**

### **Priority 1. Develop budget and implement results-based budgeting**

- Objective 1 Develop budget instructions and train agencies
- Objective 2 Identify budget expansion requests/adjustments related to the Governor's agenda and department priorities
- Objective 3 OSBM and Governor's office finalize the Governor's 2007-09 Recommended Budget
- Objective 4 Develop capital budget and six-year capital improvement plan

### **Priority 2. Improve budget presentation, systems, manuals, and internal procedures**

- Objective 1 Enhance budget systems and presentation for RBB
- Objective 2 Update State Budget Manual with regard to new State Budget Act
- Objective 3 Update OSBM Policies and Procedures Manual and distribute on Web
- Objective 4 Provide information to Beacon Steering Committee to ensure incorporation of OSBM requirements into Beacon changes
- Objective 5 Implement IT Consolidation
- Objective 6 Develop Continuity of Operations Plan (COOP) for OSBM
- Objective 7 Complete other budget publications.
- Objective 8 Develop and maintain IT plan for OSBM

### **Priority 3. Retain high performing staff, implement competency and training programs**

- Objective 1 OSBM HR assesses training requirements and sets up training request system on Web
- Objective 2 Training plan developed for each OSBM staff member
- Objective 3 Management team training needs determined and training implemented
- Objective 4 Management team begins scan for issues that might adversely impact employee retention

## Chapter 2 - Requirements for Transitioning Existing IT Activities/Resources

### Current projects

There are no existing IT projects for OSBM reported in the PPM project portfolio tool.

IT consolidation is a major IT initiative in OSBM. Consolidation is addressed elsewhere in this document.

Other major IT initiatives in OSBM are covered in the description of applications that appears below and in chapter 4 of this document.

Implementation of results-based budgeting (RBB) is a major business priority. RBB is being deployed within the existing applications listed below.

### Applications

OSBM has eight major applications defined in the Application Portfolio Management tool. A description and roadmap for each appears below.

	Application Name	2006	2007	2008	2009	2010
1	<b>Budget Allotment Module</b>  Used by agency budget officers to request allotment for cash expenditures. Documents are passed electronically for approval by OSBM, and approved allotments are passed electronically to Office of State Controller for posting to Cash Management Control System and NCAS.  <b>Strategy: Maintain until new budget and accounting systems developed. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain

	Application Name	2006	2007	2008	2009	2010
2	<b>Budget Preparation Module</b>  Used by OSBM and all state agency budget offices to prepare the Governor's budget and to certify the Legislature's budget. The dollars for each account are passed electronically to NCAS.  <b>Strategy: Maintain until new budget and accounting systems developed. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain
3	<b>Budget Revision Module</b>  Used daily by agencies to request budget changes. Documents are passed electronically to OSBM and to NCAS.  <b>Strategy: Maintain until new budget and accounting systems developed. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain
4	<b>LINC, Census Lookup, State Comparisons, CRIS, Jessica</b>  Web-enabled relational database applications for search and retrieval of summary statistical data (over 1400 data series) produced by federal and state agencies about the state's counties, municipalities, and sub-county areas from 1969. Census Lookup provides detailed census data to the block level. State comparisons provide data on the fifty states for over 200 data items. Extensive, search, reporting, and maintenance features. CRIS describes grant programs. Jessica provides an NC thesaurus.  <b>Strategy: Maintain in Oracle and apply new technologies when appropriate. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain

	Application Name	2006	2007	2008	2009	2010
5	<b>NC GILS Development Headquarters</b>  Provides search and retrieval of selected NC GILS indexes using Z39.50 protocol; maintains NC GILS Guidelines. Initially established as the result of an Executive Order. NC GILS Guidelines bring together several metadata standards.  <b>Strategy: Retire 12/31/2006. No replacement planned.</b>	Retire				
6	<b>OSBM Intranet Database Services</b>  Web-enabled relational database applications for preparation and reporting of the state budget and other OSBM functions. The following tasks accomplished by this suite of products includes: Summary of Budget Recommendations (biennial budget, long-session); Recommended Budget Adjustments (short-session); Budget Narratives (biennial budget, long-session); Post-Legislative Budget Summaries (long-session and short-session); Fee Survey and Report; Human Resources Training System; OSBM Scorecard; OSBM Emergency Contacts (part of Business Continuity Plan); Dynamic portions of main OSBM Web site; RBB.  <b>Strategy: Maintain in Oracle and apply new technologies when appropriate. In-house development and outsourcing with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain

	Application Name	2006	2007	2008	2009	2010
7	<b>Population Estimates and Projections</b>  Certified Population Estimates and official population projections: Suite of programs that execute mathematical models for estimating/projecting population in total and by age, race, and sex for NC counties and municipalities as required by state statute.  <b>Strategy: Maintain, but gradually migrate to other technologies. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain
8	<b>Salary Control Module</b>  Agency budget officers and OSBM use these functions to control salary obligations and to calculate salary reserve availability. Electronic forms from PMIS and BRS are used to extract salary and position count changes.  <b>Strategy: Maintain until new budget and accounting systems developed. In-house development with existing appropriation.</b>	Maintain	Maintain	Maintain	Maintain	Maintain

## Infrastructure assets

OSBM's infrastructure assets were reported to ITS as part of the IT consolidation pilot project. In summary, OSBM currently has 85 PCs, 4 UNIX servers, 1 Novell LAN server (MaPS-supported), and supporting network infrastructure and peripherals. A complete, detailed infrastructure inventory is available from OSBM upon request or from the ITS Consolidation Project Team. The infrastructure meets current business needs. However, RBB and other OSBM business activities will likely require additional capacity (processors, memory, storage, and software licenses) in the future. When IT consolidation is complete, all major applications will be hosted at ITS.



As part of the IT consolidation pilot project, OSBM has signed service level agreements with ITS for the following services:

- Customer Support Center -- implemented on Sept. 20, 2006
- Local Area Network -- implementation planned for Fall 2006
- Desktop Management -- partially implemented (not fully developed by ITS)
- Hosting Services -- Novell LAN server is MaPS-supported; UNIX server migration partially implemented
- Security -- partially implemented (firewall service already provided by ITS)

Mainframe services are considered to be consolidated already. OSBM applications 1-3, portions of 7, and 8 (listed above) are hosted on the ITS mainframe. Other OSBM applications (listed above) are hosted on UNIX servers and will be migrated to ITS hosting services during consolidation implementation.

## **Operations/IT management**

In June 2006, all OSBM IT classified positions were reorganized under the Assistant State Budget Officer for Data Services. This position also serves as the agency's Chief Information Officer. All IT resources are now managed within this section, including applications development/support and data resources (State Data Center and State Demographics). Improvements expected as a result of reorganization include better communication among IT staff, better coordination of mainframe and server-based resources, better representation of IT needs to OSBM management, greater clarity of IT needs as voiced by section managers and analysts, and a more unified approach to IT planning and service delivery.

Additional improvements in operations and IT management are anticipated as a result of consolidation. Some examples include:

- Completing the migration of OSBM's UNIX servers to the ITS Data Center on Wake Forest Road should relieve OSBM staff from the burden of managing IT assets that users expect to be available 24 hours a day, seven days a week. Staff should be able to devote more time to applications development, database administration, and IT management.
- Refreshing the Novell LAN server should improve reliability and remove the risk of operating a server that is no longer under warranty. Unexpected outages and delays in obtaining replacement parts should be eliminated.
- Refreshing and transitioning ownership and maintenance of network equipment to ITS should ensure reliable operation, improve security, and implement industry standards and best practices. This consolidation effort should also relieve OSBM staff from the burden of providing support for the equipment that is not currently covered by maintenance contracts.

- A monthly billing cycle with costs known upfront should improve clarity in budgeting for IT and allow better financial tracking and reporting.

## **Human resources**

### Staffing

Currently, there is one IT vacancy in OSBM. The expectation is that this position will be filled by December 31, 2006. There are no plans to add IT staff at this time.

Outsourcing is being considered to obtain improvements needed in budget document production, results-based budgeting efforts, and Web design. See Chapter 4 for an explanation of these initiatives.

### Training

OSBM has allocated approximately \$1,000 per year for each staff member for training. This amount is insufficient to support IT training. For example, a one-week Oracle course costs approximately \$3,000. Current training needs for IT staff include:

- Oracle SQL and PL/SQL or other relational database topics
- Oracle Application Server and related products
- Java technologies, including Oracle J2EE development
- Adobe Creative Suite (especially dynamically-generated Web graphics and desktop publishing)
- Geographic Information Systems
- Data exchange technologies
- Technologies for modernizing legacy systems

# Chapter 3 - IT Specific Economic-Driven Requirements or Opportunities

## Consolidation

The following improvements in OSBM are anticipated as a result of IT consolidation, some of which may be economic-driven:

### **Network Improvements**

- Replace aging network switches
- Equipment meets industry standards and is properly configured
- Spare equipment inventory to minimize outages
- UPS protection for network devices
- More secure network devices
- 24 X 7 monitoring

### **Desktop Improvements**

- Replace PCs no longer under warranty

### **Hosting (Server) Improvements**

- Replace servers no longer under warranty
- Provide secure, environmentally conditioned data center
- Provide 24 X 7 monitoring of servers
- Security and operating system patch management

### **Overall Benefits to OSBM**

- Reduction in risk due to limited OSBM staff available for hardware support
- Reduced staff responsibility for 24 X 7 maintenance of infrastructure
- Reallocation of staff to applications or other agency activities
- Improved security
- Ongoing technical support provided by ITS
- Modernization of systems for reliable enterprise wide business systems

It has not yet been fully determined if IT consolidation in OSBM will result in a cost savings. Transitioning to hosting services is generally regarded in OSBM to be revenue-neutral. Network and desktop services may result in higher costs, but certain mitigating factors may alleviate those cost increases. One factor of note in OSBM is the benefit that has already been realized as a result of reallocating a portion of the salary for one IT position to meet other needs in the agency.

## Legacy Systems

Gaps in the current budget systems were identified and noted during the study of the state's business systems conducted by Deloitte in 2003. Despite these perceived gaps, these systems continue to support OSBM business needs in a reliable and cost effective

manner. The addition of Web interfaces as well as the improvement in data transfer to OSBM's UNIX servers have proven to be low-cost strategies for extending the life and viability of these systems. It is anticipated that they will remain in place until the state replaces its statewide budget and accounting systems. In the meantime, OSBM will continue its strategy of modernizing legacy applications by:

- adding or enhancing user-friendly interfaces (i.e., Web enabling)
- adding user-requested enhancements and functionality when feasible and cost effective
- improving integration between OSBM's Oracle-based systems and mainframe systems
- improving integration between all OSBM systems and systems in other agencies through the application of MQ messaging or other data exchange methods
- developing Oracle J2EE applications
- evaluating COTS software for some OSBM business needs
- maintaining and enhancing ability to deploy applications rapidly; e.g., only six weeks were available to develop the RBB data entry application

With regard to future replacement of budget and accounting systems, OSBM is working with BEACON developers to ensure that OSBM's business needs are met in the new HR/Payroll system. Additionally, OSBM is providing input to ensure that decisions made now will be compatible with future development of new systems and support the business needs of OSBM.

#### Simplified Sign-On

OSBM has a representative on the statewide steering committee for identification management (NCID). Opportunities to apply simplified sign-on to OSBM applications are being considered.

# Chapter 4 - IT Initiatives Developed From and Aligning With Plan Drivers

## Initiative 1

**Name:** Results-Based Budgeting and Improvement of Budget Document Production Processes

### Summary Description:

Enhance mainframe and Oracle systems to provide for data collection, analysis, and reporting of results-based budgeting content. Provide repository for measures data and other RBB elements. Improve integration between mainframe and Oracle systems so that RBB data can be easily linked with financial data. Streamline budget document processes to reduce production time by developing better mechanism for streaming Oracle data to desktop publishing tool. Develop capabilities for interactive dynamically generated graphics. Develop documentation that will assist with transition to new budget and accounting systems in the future. Add processors, memory, storage, and software licensing as needed.

### Major Objectives and Benefits:

- Improve the public's and decision makers' understanding of agency missions, goals, activities, impacts, and funding by integrating fiscal information, results indicators, and descriptions of government services and by improving the analytical content, graphics, and readability of budget documents.
- Improve the clarity, consistency, and analysis of budget requests by collecting standardized supporting documentation, including measurable indicators.
- Relate expansion budget requests directly to the governor's agenda and to departmental goals, as appropriate.
- Enable analysis of effectiveness in order to improve funding, planning, and management decisions.

**Timeframe:** 2006 - 2008

### Relationship with Other Agency Initiatives:

- Budget preparation

- Budget administration

**Relationship with Statewide Initiatives:**

- Budget preparation
- Budget administration
- Statistical Coordination

**Order-of-magnitude Costs:** <\$100,000

**Source of Funds:** Current operating budget and non-recurring appropriation for 2006-07.

## **Initiative 2**

**Name:** Redesign of OSBM Web sites

**Summary Description:**

Redesign main OSBM Web site and supporting Web sites with common look and feel. Modernize design so that OSBM sites are comparable to current state-of-the-art for state budget offices. Address concerns about limitations of existing main Web site noted by National Association of State Budget Officers (NASBO).

**Major Objectives and Benefits:**

Communicate budget information plainly so that the average citizen can understand an agency's services and how well it operates. Provide additional analytical capabilities and graphics to improve understanding of budget information. Improve readability, ease of use, and search and retrieval of budget and related information.

**Timeframe:** 2006-2008

**Relationship with Other Agency Initiatives:**

- Results-based budgeting and strategic planning
- Budget preparation
- Budget administration
- Data collection, production, analysis, organization, dissemination, and explanation
- Management analyses

**Relationship with Statewide Initiatives:**

- Results-based budgeting and strategic planning

- Budget preparation
- Budget administration
- Statistical coordination

**Order-of-magnitude Costs:** <\$100,000

**Source of Funds:** Current operating budget and non-recurring appropriation for 2006-07.